# Amendments to the Drawings:

Since amendments are made to the specification to overcome the objection to informalities in the drawings for Figs. 2, 4, 5A, and 5B, no amendments are made, nor required, to these drawings.

## **REMARKS**

In view of the following remarks and the foregoing amendments, reconsideration and allowance are respectfully requested.

Claims 1-23 are pending with claims 1, 11, 22 and 23 being independent.

For the reasons set forth at page 3 of the office action, claims 1-23 stand rejected under 35 USC 101 as allegedly failing to recite patentable subject matter.<sup>1</sup>

In addition, for the reasons set forth at pages 4-9 of the office action, claims 1-23 stand rejected under 35 USC 102 as allegedly being anticipated by Cloud et al. (U.S. Patent 5,634,127).

These rejections and their underlying rationale are traversed.

### Rejection of Claims 1-23 Under 35 USC 101

Contrary to the Examiner's assertion, claims 1-23 recite patentable subject matter under 35 USC 101. For example, independent claims 1 and 23 recite "a system" including a user interface, independent claim 11 recites "a method comprising receiving data in a user interface," and independent claim 22 recites "an article comprising a machine-readable medium storing instructions operable to cause a machine to perform operations." In *Beauregard*, the Commissioner of Patents and Trademarks conceded that "computer programs embodied in a tangible medium, such as floppy diskettes, are patentable subject matter under 35 USC 101" *In re Beauregard*, 53 F.3d 1583, 1584 (Fed. Cir. 1995). Therefore, applicants submits that the Office's own policies and representations support the patentability of independent claims 1, 11, 22, and 23.

Claims 1-23 also recite statutory subject matter because these claims produce a concrete and tangible result. For example, amended claim 1 recites that a user receives a tangible result in that "the user interface is further configured to present processed data to the user." Claims 11, 22 and 23 all recite similar features to provide tangible results (e.g., processed data) to a

<sup>&</sup>lt;sup>1</sup> Although the office action failed to include claim 23 in the 35 USC 101 rejection, the Examiner clarified during a teleconference on August 3, 2006, that this omission was inadvertent and that claim 23 should similarly be regarded as rejected under 35 USC 101.

graphical user interface user. Hence, the tangible result requirement under 35 USC 101 is met in Claims 1-23. See, e.g., AT&T Corp. v. Excel Comm. Inc., 172 F.3d 1352 (Fed. Cir. 1999).

Furthermore, the USPTO Guidelines (OG Notices: 22 November 2005) themselves state that the guidelines do not trump substantive law. For example, the Guidelines state that "these Guidelines do not constitute substantive rulemaking and hence do not have the force and effect of law," and "these Guidelines have been designed to assist USPTO personnel in analyzing claimed subject matter for compliance with substantive law." Therefore, "rejections will be based upon the substantive law and it is these rejections which are appealable."

Claim 22 is patentable at least because the USPTO has issued many patents with Beauregard-type claims, such as USPN 6,810,472, USPN 6,856,620, USPN 6,850,982, USPN 6,833,707, USPN 6,810,472, and USPN 6,781,608. No new case law was introduced in the 05/05/2006 office action that would provide a prima facie case of unpatentability of Claim 22.

Therefore, because the burden of unpatentability has not been met, Claims 1, 11, 22, 23 and their respective dependent claims 2-10 and 12-21 meet the requirements for patentable subject matter under 35 U.S.C. 101.

## Rejection of Claims 1-23 Under 35 USC 102

#### Claim 1

Claim 1 is patentable over Cloud at least because Cloud fails to anticipate each and every feature of the claim as arranged in the claim. For a claim to be anticipated by the prior art, it is necessary that a single prior art reference disclose each element of the claim under consideration. *Minnesota Mining and Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565 (Fed. Cir. 1992).

Could fails to disclose the features of "an intermediate layer interposed between the user interface and the business logic and configured to rearrange data collected by the user interface into a format that is optimized for processing by the business logic" (emphasis added). As supported and described in the specification, "an intermediate layer 120 that is placed between the UI 110 and the BL layer 130 can perform several functions, including collecting data and instructions from the UI 110 and formatting and rearranging the data and instructions for appropriate use in the BL layer 130," and "the intermediate layer 120 can collect

data and instructions from the BL layer 130 and format and rearrange the data and instructions for appropriate use in the UI 110" (specification: page 6, paragraph 16; Fig. 1). Cloud is silent about the intermediate layer and the related features of the intermediate layer as recited in the claims.

Cloud discloses a system where a message driven processor (MDP) functions as middleware between clients and back-end hosts or servers to reduce a number of concurrent sessions and to allow a common client user interface to divergent back-end systems (Cloud: Abstract). As shown in Fig. 4, the MDP 450 is a layer between the servers (hosts) 440 and the end user clients 400 (Cloud: Col. 7, lines 30-57). The MDP includes a client connectivity layer 410 to connect with the clients 400, a work flow management layer 420 for business functions. and a server connectivity layer to connect with the servers 440. Cloud discloses that client connectivity layer 410 insulates the business process from device specific communication protocols and connects with clients by filtering out "device specific protocols and allow business requests, in the form of messages, to be passed on to the workflow management layer" (Cloud: Col. 7, lines 57-67; Col. 8, lines 1-15). Some of the communication protocols that are blocked are SNA protocols, TCP/IP protocols, and IBM protocols LU6.2, LU0, LU2, and MOI (Cloud: Col. 1, lines 50-67; Col. 2, lines 1-3; Col. 12, lines 34-48; Col. 12, lines 66-67; Col. 13, lines 1-4), while the client connectivity layer 410 is responsible for sending messages to and receiving messages from the workflow management layer (Cloud: Col. 7, lines 57-67; Col. 8, lines 1-35). The server connectivity layer 430 performs some of the same functions as the client connectivity layer 410, such as serving as a communication protocol engine to block various communication protocols from the work flow management layer 620 (Cloud: Col. 7, lines 51-57; Col. 12, lines 25-31; Figs. 4-6). But instead of connecting to the client end, the server connectivity layer 430 connects to back end systems and applications for interaction with the work flow management layer (Cloud: Col. 7, lines 51-57; Col. 12, lines 25-31; Figs. 4-6).

The office action asserts that the server connectivity layer of Cloud is allegedly the same as the business logic layer of Claim 1. Furthermore, the office action asserts that the work flow management layer of Cloud is allegedly the same as the claimed intermediate layer. However, the assertions made in the office action are incorrect. In particular, (1) the server layer is not the business logic layer, (2) Cloud is silent about disclosing an intermediate layer, and (3) the work

flow management layer can handle some of the features of the business logic layer instead of the intermediate layer of Claim 1.

- 1) As described above with respect to the server connectivity layer of Cloud, the server connectivity layer performs the communication protocol filtering and converting features (e.g., filtering and converting SNA, TCP/IP, LU6.2, LU0, LU2, and MQI protocols) instead of being the layer that performs the actual business processing (Cloud: Col. 7, lines 51-57; Col. 12, lines 25-31; Figs. 4-6). Therefore, the server connectivity layer in Cloud does not disclose or suggest the recited business logic layer. Furthermore, since the server connectivity layer functions on communication protocols and does not collect and rearrange the actual data into a format that is optimized for the business logic layer, the server connectivity layer of Could does not suggest not the claimed intermediate layer. Another reason why Cloud's server connectivity layer is not the claimed intermediate layer is because Cloud discloses that the server connectivity layer communicates directly with the back end servers, and not the front end clients or user interfaces (Cloud: Abstract, Fig. 4). Thus, Claim 1 is patentable over Cloud for at least this reason.
- 2) Moreover, Cloud is silent about disclosing an intermediate layer as recited in Claim 1. Cloud fails to disclose a layer for the purpose of rearranging "data collected by the user interface into a **format that is optimized for processing by the business logic**." As discussed above, Cloud discloses the server connectivity layer, the workflow management layer, and the client connectivity layer (Cloud: Col. 7, lines 30-57; fig. 4). None of these layers disclosed in Cloud are configured to collect data from a user interface to rearrange data into a **format** that is optimized for processing by the business logic to decrease the complexity of the business logic and enhance efficiency and throughput. Hence, Claim 1 is further patentable over Cloud for at least this additional reason.
- 3) Furthermore, Cloud discloses the workflow management layer is composed of a development environment and a run-time environment, where the workflow management layer can control the enablement, generation, and processing of messages in the form of workflows (Cloud: Col. 9, lines 18-27). The workflow itself can be organized into one or more units of work as part of a business request (Cloud: Col. 10, lines 3-5). Cloud discloses fast pass business requests (Col. 13, lines 26-33) and transactional work flows (Cloud: Fig. 8). Cloud also

discloses in Fig. 8, for example, that it is the workflow management layer 810 that controls the business request processing. Hence, although Cloud discloses that the workflow management layer has some of the features for data processing as the business logic layer in Claim 1, Cloud's workflow management layer does not disclose or suggest the claimed intermediate layer, which prepares data collected from the user interface into a format that is optimized for processing in the business logic layer. Therefore, the burden to establish anticipation, either expressly or impliedly, has not been met (MPEP §§706.02 and 2131).

For at least these reasons, Claim 1 is allowable over Cloud because Cloud fails to teach each and every feature as recited in Claim 1.

#### Claims 11, 22, 23

Independent Claims 11, 22, and 23 recite features similar to Claim 1 and are patentable over Cloud for at least the same reasons above as Claim 1. Hence, the rejection to Claims 11, 22, and 23 under 35 U.S.C. 102 should be withdrawn.

#### Claims 2-10, 12-21

Dependent Claims 2-10, 12-21 are all patentable at least for depending upon and allowable base claim (base Claim 1 for Claims 2-10; base Claim 11 for Claims 12-21). These claims are further patentable for reciting allowable subject matter in their own right.

For example, Cloud fails to disclose all of the features of Claim 14, including "wherein the object model controller is configured to allow a user to prevent other users from modifying data until a save data instruction is received in the user interface." In particular, Cloud discloses that it is the workflow developer rather than the end user that makes the decisions for the data, including deciding "the length, content, and the request and reply format during the workflow Development phase," and the length of the message data context (Cloud: Col. 12, lines 4-19). Cloud also discloses that the user can save data when the workflow debugger is activated to debug the workflows during simulation tests of the workflow (Cloud: Col 19, lines 49-67; Col. 20, lines 30-37). However, Cloud is silent about preventing a user from actually "modifying data until a save data instruction is received from the user interface," as recited in Claim 14. For at

least these reasons, Cloud does not anticipate each and every feature of Claim 14, and Claim 14 is in condition for allowance.

#### CONCLUSION

In view of the amendments and remarks herein, Applicants submit that Claims 1-23 are in condition for allowance and ask that these pending claims be allowed. The foregoing comments made with respect to the positions taken by the Examiner are not to be construed as acquiescence with other positions of the Examiner that have not been explicitly contested. Accordingly, the arguments for patentability of a claim should not be construed as implying that there are not other valid reasons for patentability of that claim or other claims.

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Respectfully submitted,

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